

**DEPARTMENT OF ENVIRONMENTAL QUALITY  
ANNOUNCEMENT OF TECHNICAL ADVISORY COMMITTEE  
MEETING FOR A WATER QUALITY STUDY (TMDL) OF  
CROOKED RUN, STEPHENS RUN, WEST RUN, HAPPY CREEK,  
MANASSAS RUN, WILLOW BROOK, BORDEN MARSH RUN, AND  
LONG BRANCH**

COMMITTEE MEETING: A Technical Advisory Committee meeting which is open to the public will be held Tuesday, March 4, 2014 at 4pm at the Samuels Public Library at 330 E. Criser Rd in Front Royal. This meeting will be open to the public and all are welcome. In the case of inclement weather, please contact Tara Sieber at (540) 574-7870.

PURPOSE OF NOTICE: The Department of Environmental Quality (DEQ) and its contractors, Virginia Tech's Biological Systems Engineering Department, will discuss population data for the development of a water quality study known as a Total Maximum Daily Load (TMDLs) for Crooked Run and its tributaries, including Stephens Run and West Run, Happy Creek, Manassas Run, Willow Brook, Borden Marsh Run and Long Branch. This is an opportunity for local residents to share information about the area and its local streams.

MEETING DESCRIPTION: The Technical Advisory Committee will meet to discuss details of the local landuse in these watersheds, review population numbers especially regarding human dwellings and pet estimates, offer initial findings of the pollutants and issues involved in the unique impairments in Happy Creek and Crooked Run, and review next steps. Section 303(d) of the Clean Water Act and §62.1-44.19:7.C of the Code of Virginia require DEQ to develop TMDLs for pollutants responsible for each impaired water contained in Virginia's 303(d) TMDL Priority List and Report.

DESCRIPTION OF STUDY: Several streams in the Shenandoah River watershed do not meet Virginia's water quality standards due to excessive bacteria and have been placed on the 2006, 2008, and 2010 303(d) TMDL Priority List and Report as impaired. The bacteria standard preserves the "Primary Contact (recreational or swimming)" designated use for Virginia waterways. Excessive bacteria levels may pose a threat to human health. This water quality study reports on the sources of bacterial contamination and recommends reductions to meet Total Maximum Daily Loads (TMDLs) for the impaired waters. A TMDL is the total amount of a pollutant a water body can contain and still meet water quality standards. To restore water quality, bacterial levels need to be reduced to the TMDL amount. Virginia agencies are working to identify sources of bacterial contamination in the tributaries to the Shenandoah River, which will include the following waterways:

<b>Stream</b>	<b>County</b>	<b>Length (miles)</b>	<b>Impairment</b>
Crooked Run	Frederick/Warren	8.87 mi	Bacteria (E. coli)
Stephens Run	Frederick	0.95 mi	
West Run	Frederick/Warren	6.12 mi	
Happy Creek	Warren	8.42 mi	
Manassas Run	Warren	9.15 mi	
Willow Brook	Warren	3.95 mi	
Borden Marsh Run	Clarke/Warren	9.46 mi	
Long Branch	Clarke	3.63 mi	

In addition, Happy Creek does not host a healthy and diverse population of aquatic life, and subsequently was listed as impaired for the “General Benthic (Aquatic life)” water quality standard. This water quality study (TMDL) will review all data collected and determine the cause of the benthic impairment through a weight of evidence approach. Reductions and a TMDL for the cause of the impairment will be developed.

<b>Stream</b>	<b>County</b>	<b>Length (miles)</b>	<b>Impairment</b>
Happy Creek	Warren	8.42 mi	Aquatic Life

In addition, Crooked Run and Stephens Run have very low Dissolved Oxygen (DO) levels and therefore was listed as impaired for the DO water quality standard. This water quality study (TMDL) will review all data collected and determine the cause of the low DO levels through a weight of evidence approach. Reductions and a TMDL for the cause of the impairment will be developed.

<b>Stream</b>	<b>County</b>	<b>Length (miles)</b>	<b>Impairment</b>
Crooked Run	Frederick/Warren	8.87 mi	DO

HOW TO PARTICIPATE: The meetings of the Technical Advisory Committee are open to the public and all interested parties are welcome. Written comments are always accepted. For more information or to submit written comments, please contact:

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